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Supplemental Material

Prenatal PBDE and PCB Exposures and Reading, Cognition, and Externalizing Behavior in Children

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Table S1. Coefficients in LASSO test of maternal chemical concentrations to children's reading scores, FSIQ and Externalizing Problems score at age 8 years

Models	Chemicals	Reading Composite	FSIQ	Externalizing Problems
Model 1	Log ₁₀ Sum ₄ PBDEs	-5.6	-3.8	2.1
	Log ₁₀ Sum ₄ PCBs	6.5	0.5	-
Model 2	$Log_{10}BDE-47$	-	-	-
	$Log_{10}BDE-99$	-	-4.1	0.5
	$Log_{10}BDE-100$	-3.8	-	-
	$Log_{10}BDE-153$	-1.6	-0.5	2.2
	Log ₁₀ PCB-118	1.0	-	-0.3
	Log ₁₀ PCB-138-158	-	-	-
	Log ₁₀ PCB-153	6.2	-	-
	Log ₁₀ PCB-180	0.5	1.3	

^{^:} Adjusted for maternal age, education, race, IQ, household-income, parity, marital status, maternal smoking (serum cotinine concentrations), depression, fish consumption, child sex, and HOME score. It can not yield 95% Cis when selecting variables and estimating parameters.

Model 1: LASSO regression with Log₁₀Sum₄PBDEs and Log₁₀Sum₄PCBs after adjustment.

Model 2: LASSO regression with Log₁₀ transformed PBDE congeners (BDE-47, -99, -100, and -153) and PCB congeners (PCB-118, -138-158, -153, and -180) after adjustment.

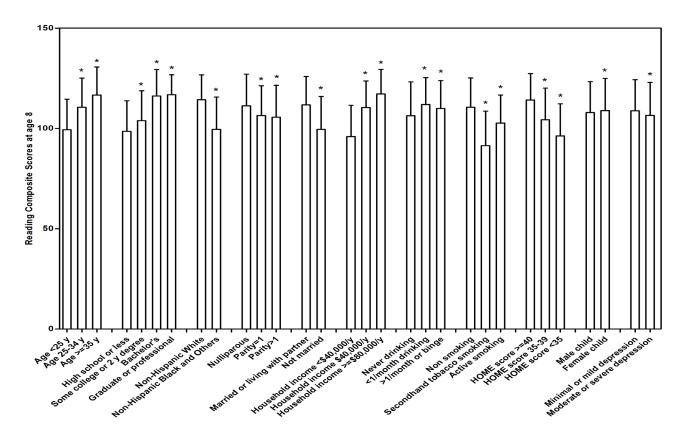


Figure S1. Children's Reading Composite scores at age 8 years by maternal participants and children's demographic characteristics in the HOME Study ("*": p < 0.05 comparing to the first subgroup given in this graph.)